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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/638,099	08/07/2003	Robert R. Gallucci	RD27416-2	3376
23413	7590	06/26/2007		
CANTOR COLBURN, LLP 55 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002			EXAMINER TRAN, THAO T	
			ART UNIT 1711	PAPER NUMBER
			MAIL DATE 06/26/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/638,099

Applicant(s)

GALLUCCI ET AL.

Examiner

Thao T. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 April 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,4,5,7,9,10,15-19,21 and 22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4,5,7,9,10,15-19,21 and 22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/16/07</u> . | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This is in response to the Amendments filed on 4/16/2007.
2. Claims 1, 4-5, 7, 10-11, 15-19, 21-22 are currently pending in this application.
3. In view of the prior Office action, the obviousness-type double patenting rejection is sustained. The prior art rejections of the claims have been withdrawn due to the amendments made thereto.
4. New 112 and prior art rejections are as set forth below.

#### *Double Patenting*

#### *(From the prior Office action)*

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1, 4-5, 7, 10-11, 15-19, 21-22 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-16 of U.S. Patent No.

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7,132,149. Although the conflicting claims are not identical, they are not patentably distinct from each other because the patented claims are broader in scope than the instant claims, rendering them obvious over each other.

Patented claims 1-2, 7, 13, and 16 disclose all the limitations as recited in instant independent claims 1, 19, and 21. Thus, the scope of independent claims 1 and 16 of the patent embraces that of instant claims 1, 19, and 21, rendering them obvious over each other.

### *Claim Rejections - 35 USC § 112*

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 1, 4-5, 7, 10-11, 15-17, and 21-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 1, 19, and 21 contain the newly added limitation, “wherein the reflective metal layer has a thickness of at least 20 nm”. The claimed range does not have proper support in the specification as originally presented, because it does not provide an upper limit to the thickness of the metal layer. The specification, paragraph 0050, discloses the thickness of the metal layer to be about 1nm to about 1000 nm, and within this range preferably at least about 20 nm. This description conveys the metal layer to be at least about 20 nm to about 1000 nm.

***Claim Rejections - 35 USC § 103***

9. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

10. Claims 1, 4-5, 7, 10-11, 15-17, 19, 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knapp et al. (US Pat. 5,846,649) in view of Fraizer (US Pat. 6,520,650) or Tanikita et al. (US Pat. 5,833,889).

Knapp discloses a lens or optics, comprising a substrate and a multilayer coating (see col. 1, ln. 112-19). The substrate is made from polycarbonate or polymethylmethacryalte (see abstract; col. 8, ln. 57-61). The substrate is coated with a first abrasion-resistant coating layer of plasma-polymerized organosiloxane or organosilazane from precursors such as hexamethyldisilazane or octamethylcyclotetrasiloxane (see col. 10, ln. 1-16), meeting the requirement of the haze-prevention layer. The first abrasion-resistant coating layer is in turn coated with a dielectric layer, which is also a plasma-polymerized organosiloxane or organosilazane (see col. 12, ln. 1-18), meeting the requirement of the protective layer. A reflecting layer of aluminum is between the first abrasion resistant coating layer and the dielectric layer (see col. 13, ln. 39-48; col. 14, ln. 4-9).

The substrate has a thickness of 1/8 in (or 3.175 mm) (see col. 14, ln. 51-52). The first abrasion-resistant coating layer has a thickness of about 5 to about 20 microns (see col. 11, ln. 12-15).

With respect to the substrate, Knapp does not teach the use of any additive. Therefore, the substrate of the reference would inherently be free of inorganic filler.

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With respect to the properties of the article, since the article of Knapp contains the same components, it would inherently have the same properties as presently claimed.

Knapp does not teach the reflecting metal layer to be at least to be 20 nm as presently claimed.

Fraizer discloses a reflective article, comprising a metal reflective layer in between two layers of organosilicon, wherein the metal layer is 60 nm thick (see Fig. 2; col. 4, ln. 20-22).

Therefore, it would have been obvious to one of ordinary skill in the art to have employed the thickness of the metal layer as taught by Fraizer in the article of Knapp because Fraizer discloses that at thickness the metal layer would obtain optimal reflection with the least cost (see Fraizer, col. 4, ln. 19-20).

Knapp discloses that the article is intended to include a variety of transparent plastic articles, which permit viewing (see col. 1, ln. 21-24). Therefore, it would have been obvious to one of ordinary skill in the art that the article of Knapp would have used as a headlight reflector in an automotive, which is transparent and permits viewing.

### ***Response to Arguments***

**11.** Applicant's arguments with respect to the 102 and 103 rejections of the claims as anticipated by and unpatentable over Knapp have been considered but are moot in view of the new ground(s) of rejection.

**12.** With respect to the obviousness-type double patenting, Applicants argue that the haze prevention layer in the instant claims is electrically non-conductive while that in the patented claims in US Pat. 7,132,149 is electrically conductive. It is noted that firstly the instant claims do

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not specify whether the haze prevention layer is electrically conductive or non-conductive.

Secondly, the claim language is directed to “comprising” which is open to the inclusion of materials in addition to the claimed materials.

*13.* The examiner acknowledges that a terminal disclaimer was filed on 2/15/2005 to overcome the provisional rejection over US Application SN 10/638145. However, Applicants are required to submit a terminal disclaimer to overcome the obviousness-type double patenting over US Pat. 7,132,149 as indicated above.

#### *Conclusion*

*14.* Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao T. Tran whose telephone number is 571-272-1080. The examiner can normally be reached on Monday-Friday, from 9:00 a.m. - 5:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Thao T. Tran  
Primary Examiner  
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